

### Abstract Of The Disclosure

5 A personal portable phone, such as a cell phone, has an antenna (and preferably two antennas) which are mounted on an antenna base that slides over the ear piece when the phone is not in use and slides to a protracted position when the phone is in use.

In a non-use state, the two antennas are rotated down flush with the antenna base.

10 When in use, and in a protracted state, the two antennas are rotated up to a position such that the plane of the antenna is perpendicular to the plane of the base and the plane of the ear piece. In that position, each antenna is used to transmit electromagnetic radiation in a conical pattern. The pattern shown is a circular cone having an included angle of about  $30^\circ$  to  $60^\circ$ . The axes of the two conical patterns are parallel to the plane of the antenna base and plane of the ear piece so that the two conical patterns miss the head of the user and only a minimal or trivial amount  
20 of electromagnetic radiation impinges on the head of the user.